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REMARKS

Claims 1-49 are currently pending in the subject application and are presently under consideration. Claims 1, 29, 34 and 36 have been amended, claims 4 and 35 have been cancelled, and new claims 45-49 have been added to further emphasize various aspects of the claimed invention. In addition, the specification has been amended to correct a typographical error.

Favorable reconsideration of the subject patent application is respectfully requested.

I. Rejection of Claims 1-44 Under 35 U.S.C. §103(a)

Claims 1-44 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Lumelsky *et al.* (US 6,463,454) in view of Colby *et al.* (US 6,625,643). Reversal of this rejection is respectfully requested for at least the following reasons.

Claims 1-28 recite the limitation wherein *a topology manager* communicates with a plurality of members to initiate *scaling of the applications* associated with a virtual applications manager across the members and to initiate *synchronization of member content and configuration*. Claims 29-33 and 34-44 recite similar limitations. Neither Lumelsky *et al.* nor Colby *et al.*, alone or in combination, teach or suggest this novel feature of the subject claims. Moreover, there is no teaching, suggestion, or motivation in the prior art to combine the cited references as suggested - Lumelsky *et al.* actually *teaches away* from modifying its load balancing system to include a topology manager to initiate synchronization of member content and configuration. Thus, the cited references fail to teach or suggest the claimed subject matter as a *whole*.

The test of obviousness is whether "the subject matter sought to be patented and the prior art are such that the subject matter as a *whole* would have been obvious at the time the invention was made to a person having ordinary skill in the art." (*Graham v. John Deere Co.*, 383 U.S. 1, 3 (1966) (emphasis added); *see also e.g., In re Dembiczak*, 175 F.3d 994, 998, 50 U.S.P.Q. 1614, 1616 (Fed. Cir. 1999)). In evaluating obviousness, the PTO must conduct the factual inquiry as outlined in *Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966). (*See In re Lee*, 277 F.3d 1338, 1342-43, 61 U.S.P.Q.2d 1430, 1433 (Fed. Cir. 2002)). The factual inquiry to be conducted includes determining: (1) the scope and

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content of the prior art; (2) the level of ordinary skill in the prior art; (3) the differences between the claimed invention and the prior art; and (4) objective evidence of nonobviousness. (*See Graham*, 383 U.S. 1, 17-18 (1966)). The PTO must "not only assure that the requisite findings are made, based on evidence of record, but must also explain the reasoning by which the findings are deemed to support the agency's conclusion." (*In re Lee*, 277 F.3d at 1344, 61 U.S.P.Q.2d at 1434). The PTO cannot rely merely on conclusory statements and assertions of "common sense" to remedy deficiencies of the cited references. (*In re Lee*, 277 F.3d at 1344, 61 U.S.P.Q.2d at 1434). If the PTO relies on multiple prior art references as the basis for an obviousness rejection, it is not enough that all of the claim limitations appear in the prior art. To establish a *prima facie* case of obviousness, the PTO must also make an adequate showing of a suggestion, teaching, or motivation to combine the prior art references. (*See In re Dembiczak*, 175 F.3d 994, 999-1001, 50 U.S.P.Q. 1614, 1617 (Fed. Cir. 1999) (citing to *C.R. Bard, Inc., v. M3 Systems, Inc.*, 157 F.3d 1340, 1352, 48 U.S.P.Q.2d 1225, 1232 (Fed. Cir. 1998)); *see also In re Lee*, 277 F.3d at 1343, 61 U.S.P.Q.2d at 1433). Only if the PTO establishes a *prima facie* case of obviousness does the burden of coming forward with evidence or argument shift to the applicant. (*See In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1445 (Fed. Cir. 1992)).

Lumelsky *et al.* discloses a load balancing system in which an intermediate node manages requests for multimedia objects. (*See Lumelsky* at col. 8, lines 51-57). The requests are forwarded to servers to process based on demand and capacity. (*See Lumelsky et al.* at Abstract). The system can place replicas of the multi-media objects on global servers according to demand and capacity constraints. (*See Lumelsky* at col. 7, lines 18-21). However, the cited reference does not teach or suggest a topology manager that initiates scaling of applications across a plurality of members as in applicants' claimed invention. Scaling of applications "enables applications to be defined that redundantly and/or cooperatively function as an entity even though the application may be spread amongst a plurality of systems." (Application at p. 4, lines 1-3). The system of Lumelsky *et al.* merely balances load and places a replica (*i.e.*, a copy) of a multi-media object onto a global server according to demand and capacity. Moreover, the Examiner has acknowledged that Lumelsky *et al.* does not disclose a topology manager as recited in the subject claims. (*See Office Action* at p. 6).

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Additionally, Lumelsky *et al.* does not teach or suggest a topology manager that initiates synchronization of the content and configuration of a plurality of members. The Examiner contends that the system of Lumelsky *et al.* is capable of "process synchronization for planning and distribution," and cites to column 7, lines 25-40 to support this contention. (Office Action dated Dec. 12, 2004 at p. 4). This section of states that:

It is important to note that the present invention achieves the above while *preserving the autonomy of servers over the control of their resources*. The resource management system is decentralized in that resource management controls (e.g., admission control, resource reservation, resource measurements, resource scheduling, etc.) are implemented locally, at each server, and not centralized at the controller. *Controllers do not directly manage servers and their resources*. Instead, controllers represent agents that forward control recommendations to servers.

(Lumelsky *et al.* at col. 7, lines 25-33) (emphasis added). Nothing in the section quoted above indicates that synchronization of member content and configuration occurs. Indeed, the statements "preserving the *autonomy* of servers over the control of their resources" and "[c]ontrollers *do not directly manage* servers and their resources" teach away from synchronization of member content and configuration.

Colby *et al.* discloses a system for managing a broadcast session on a network. The system includes topology managers that assign and track resources and events and store this information in a topology database. (See Colby *et al.* at col. 7, lines 21-30). Redundant copies of the topology manager run on separate computers in separate locations on the network. (See Colby *et al.* at col. 6, lines 4-7). Upon initialization, a topology manager synchronizes its database with the other topology managers. (See Colby *et al.* at col. 6, lines 57-65). Each topology manager forwards each request it receives to the other topology managers to allow the other topology managers to update their databases to reflect this information. (See Colby *et al.* at col. 6, lines 47-56). Although the topology managers of Colby *et al.* synchronizes *their own topology databases*, nothing in Colby *et al.* teaches synchronization of *member content and configuration* as recited in the subject claims. Furthermore, the topology managers of Colby *et al.* merely track and assign resources and events, but do not *scale applications* across a plurality of members as is also recited in the subject claims.

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In view of at least the foregoing, it is readily apparent that neither Lumelsky *et al.* nor Colby *et al.*, alone or in combination, teach or suggest the claimed subject matter as a *whole*. Hence, this rejection should be withdrawn and allowance of the subject claims is respectfully requested

II. New Claims 45-49

Claims 45-49 respectively depend from independent claims 1, 29 and 34. By virtue of this dependency, claims 45-49 contain all limitations of their corresponding independent claim, and are patentable for at least the reasons noted above regarding these independent claims.

CONCLUSION


The present application is believed to be in condition for allowance in view of the above comments and amendments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063 [MSFTP123USA].

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicants' undersigned representative at the telephone number below.

Respectfully submitted,

AMIN & TUROCY, LLP



Himanshu S. Amin
Reg. No. 40,894

AMIN & TUROCY, LLP
24TH Floor, National City Center
1900 E. 9TH Street
Cleveland, Ohio 44114
Telephone (216) 696-8730
Facsimile (216) 696-8731